

Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

### September 29, 2016

NeoMed, Inc. Melinda Harrison Smith, RAC, ASQ-CBA Director, Quality and Regulatory Affairs 100 Londonderry Court, Suite 112 Woodstock, GA 30188

Re: K143344

Trade/Device Name: NeoMed NeoConnect<sup>TM</sup> Enteral Syringes with ENFit Connector

Regulation Number: 21 CFR §876.5980

Regulation Name: Gastrointestinal tube and accessories

Regulatory Class: II Product Code: PNR Dated: March 11, 2015 Received: March 13, 2015

Dear Melinda Harrison Smith,

This letter corrects our substantially equivalent letter of April 7, 2015.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely,

For Division

Douglas Silverstein -S 2016 09:29 08:04:39 -04'00'

Benjamin R. Fisher, Ph.D.
Director
Division of Reproductive, Gastro-Renal,
and Urological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure

# DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

# **Indications for Use**

510(k) Number (if known)

Form Approved: OMB No. 0910-0120 Expiration Date: January 31, 2017 See PRA Statement below.

K143344		
Device Name NeoMed NeoConnect™ Enteral Syringes with ENFit Connector		
Indications for Use (Describe) The device is indicated for use as a dispenser, a measuring device and a fluid transfer device. It is used to deliver fluids into the body via extension sets and feeding tubes in neonatal and small pediatric patients.		
Type of Use (Select one or both, as applicable)		
Prescription Use (Part 21 CFR 801 Subpart D) Over-The-Counter Use (21 CFR 801 Subpart C)		

CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

#### \*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\*

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

Department of Health and Human Services Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff PRAStaff@fda.hhs.gov

"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."

# TRADITIONAL 510(K) SUMMARY (21 CFR § 807.92)

I. SUBMITTER NeoMed, Inc.

100 Londonderry Court

Suite 112

Woodstock, GA 30188 Tel: 770-516-2225 Fax: 770-516-2448

Contact: Melinda Harrison Smith, RAC, CBA

mharrison@neomedinc.com

Date Prepared: 18 November 2014

Establishment 3006520777

Registration Number:

## II. DEVICE

Trade Name: NeoConnect<sup>™</sup> Enteral Syringes

Common Name: Enteral Syringe

Classification Name: Gastrointestinal tube and accessories (21 CFR § 876.5980)

Regulatory Class:

Product Code: PIF

#### III. PREDICATE DEVICE

NeoMed Oral / Enteral Syringe (0.5ml to 100ml) (K122373)

This predicate had not been subject to a design-related recall.

# IV. DEVICE DESCRIPTION

The NeoMed NeoConnect™ Enteral Syringes are standard piston style syringes consisting of a syringe barrel with integral ENFit syringe tip, syringe plunger, syringe gasket, and supplied with a syringe tip cap. They are provided in varying sizes ranging from 0.5ml to 100ml nominal capacity. The integral syringe tip is a female ENFit connector which is compatible only with feeding tubes and extension sets that have ENFit male connectors to form a dedicated system that prevents wrong-route administration of fluids. They possess translucent barrels to provide visualization of fluid contents and volume.

# V. INDICATIONS FOR USE

The device is indicated for use as a dispenser, a measuring device and a fluid transfer device. It is used to deliver fluids into the body via extension sets and feeding tubes in neonatal and small pediatric patients.

# VI. COMPARISON OF TECHNOLOGICAL CHARACTERISTICS WITH THE PREDICATE

Feature	PREDICATE DEVICE	SUBJECT DEVICE
Indications for Use /	The device is indicated for use as	The device is indicated for use as a
Intended Use	a dispenser, a measuring device	dispenser, a measuring device and
Statement	and an oral fluid transfer device. It	a fluid transfer device. It is used to
	is used to inject fluids into the body	deliver fluids into the body via
	via extension sets and feeding	extension sets and feeding tubes in
	tubes in neonatal and small	neonatal and small pediatric
	pediatric patients.	patients.
Patient Population /	Neonates and Small Pediatrics/	Neonates and Small Pediatrics/
Environment of Use	Hospital, Disposable and for single	Hospital, Disposable and for single
5	patient use only	patient use only
Description of Device	An oral / enteral syringe consisting	An enteral syringe consisting of a
	of a syringe barrel with integral tip	syringe barrel with integral tip
	(tapered), plunger, gasket, barrel	(ENFit), plunger, gasket, barrel
	lubricant and supplied with a	lubricant and supplied with a
O T	syringe tip cap.	syringe tip cap.
Syringe Type	Oral / Enteral Syringe	Enteral Syringe
Principle of Operation	Piston Style Syringe	Piston Style Syringe
Syringe Tip Type		ENFit
	Toward	(Dimensional compliance to
	Tapered	AAMI/CN3:2014 (PS) Part 3 Table
		B.2 Female Enteral Small-Bore Connector).
Suringo Sizoo		Connector).
Syringe Sizes	0.5ml to 100ml sizes	0.5ml to 100ml sizes
(nominal volumes)		
Syringe Barrel with	Barrel – Polypropylene, class VI	Barrel – Polypropylene, class VI
integral syringe tip and	Graduation Ink – Orange	Graduation Ink – Orange or Purple
volume graduations		
Integral Syringe Tip	9500 Kg/cm² (932 MPa)	9500 Kg/cm² (932 MPa)
Flexural Modulus	. ,	, ,
Syringe Plunger	Inert Polypropylene, class VI	Inert Polypropylene, class VI
	White Colorant	White Colorant
Syringe Gasket	Silicone, Class VI, Black Colorant	Silicone, class VI, Black Colorant
Syringe Tip Cap	Inert Polypropylene, class VI	Inert Polypropylene, class VI
	Orange Colorant	Orange or Purple Colorant
Barrel Lubricant	Polydimethylsiloxane class VI	Polydimethylsiloxane class VI
Packaging Material	Tyvek or medical grade paper /	Tyvék or médical grade paper / film
	film primary pouch, Double Flute	primary pouch, Double Flute paper
	paper corrugate case box	corrugate case box
Sterilization Method, SAL	Ethylene Oxide (EO), 10 <sup>-6</sup> SAL	Ethylene Oxide (EO), 10 <sup>-6</sup> SAL
Human Factors and	Design Validation	Design Validation
Usability		Device Master File #MAF2258
Risk Analysis	Device Risk Assessment including	Device Risk Assessment including
	Design and User FMEA	Design and User FMEA
		Device Master File #MAF2258

# VII. PERFORMACE DATA (BENCH)

The following performance testing was conducted on the NeoConnect<sup>™</sup> Enteral Syringe:

- Finished Device
  - Risk Analysis including design, user and process FMEA (Failure Modes and Effects Analysis) in accordance with EN ISO 14971:2012
  - Human Factors and Usability Validation
  - Biocompatibility
    - ISO 10993-5: Cytotoxicity
    - ISO 10993-10: Irritation and sensitization
    - ISO 10993-11: Acute Toxicity
  - Chemical Testing
    - Extractables and Leachables
  - Finished Device Verification Testing
    - Critical Dimension verification
    - Ink Adhesion
    - ISO 7886
      - Capacity Tolerance
      - Graduated Scale
      - Piston Fit in Barrel
      - Air and Liquid Leakage Testing
- Syringe Tip (ENFit connector)
  - o Enteral Connector Misconnection Assessment
  - ENFit Connector Risk Management Report (including misconnections FMEA)
  - Human Factors Validation Study
  - o Dimensional verification
  - Liquid Leakage Testing
  - Stress Cracking
  - Resistance to separation from axial load
  - Resistance to separation form unscrewing
  - Resistance to overriding
  - o Disconnection by unscrewing

#### VIII. CONCLUSIONS

The NeoMed NeoConnect<sup>™</sup> Enteral Syringes are substantially equivalent to the NeoMed Oral / Enteral Syringe (K122373).